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VII. 510-(k) Summary

This summary of 510(k) safety and effectiveness information is submitted in accordance with 21 CFR 807.92.

General Information:

A. Submitted By:

Cardiovascular Imaging Technologies

4320 Wornall Road, Suite 55 Kansas City, MO 64111

Tel: 816-531-2842 Fax: 816-531-0643

Contact Person:

James A. Case

B. Device Trade Name:

ImagenMD™

Classification Name:

System, Emission Computed Tomography

C. Predicate Devices:

AutoQUANT -- ADAC Laboratories

SeeMor -- Areeda Assicuates QBS -- ADAC Laboratories

D. Device Description:

ImagenMD™ is a software application installed on laptop computers which allows physicians and healthcare professionals to view myocardial perfusion SPECT or PET images from their office, hospital or home. The system processes perfusion and gated SPECT performing quantitative data analysis. The user can select raw, short axis, transmission slice and gated short axis studies for the purpose of examining those images for abnormalities and artifacts. The system contains optional databases which quantify the extent and severity of myocardial defects. Also included is an application for the display and analysis of gated short axis blood pool SPECT datasets. Use of this system is limited to qualified, licensed healthcare providers (radiologists, nuclear cardiologists or nuclear medicine physicians) trained in the use of nuclear medicine imaging devices. f

E. Indications for Use:

The ImagenMD™ system is a software and computer system that allows the user to view myocardial perfusion SPEC or PET images. The system, when the QBS option is used, may also be used in the display and analysis of gated short axis

blood pool (red blood cells, RBC) SPECT datasets. The system allows the user to view quantify and process perfusion and gated SPECT images.

F. Comparison of Technical Characteristics to Predicate Device:

The ImagenMD™ system and its predicates, AutoQUANT, QBS and SeeMor have similar indications for use, utilize the same type of data sets for analysis and calculation of data.

H. Summary:

Testing and comparison of technological characteristics and intended uses found that all components of the ImagenMD $^{\mathsf{TM}}$



Food and Drug Administration 9200 Corporate Boulevard Rockville MD 20850

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Cardiovascular Imaging Technologies % Ms. Melanie Hasek Sr. Regulatory Affairs Specialist Regulatory/Clinical Consultants, Inc. 200 NE Mulberry LEE'S SUMMIT MO 64086 Re: K041671

Trade/Device Name: ImagenMD™ Computer System

Regulation Number: 21 CFR 892.1200 Regulation Name: Emission computed

tomography system

Regulation Number: 21 CFR 892.2050 Regulatory Name: Picture archiving and

Communications system

Regulatory Class: II

Product Code: 90 KPS and LLZ

Dated: June 18, 2004 Received: June 21, 2004

Dear Ms. Hasek:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of Compliance at one of the following numbers, based on the regulation number at the top of the letter:

| 8xx.1xxx | (301) 594-4591 |
|----------------------------------|----------------|
| 876.2xxx, 3xxx, 4xxx, 5xxx | (301) 594-4616 |
| 884.2xxx, 3xxx, 4xxx, 5xxx, 6xxx | (301) 594-4616 |
| 892.2xxx, 3xxx, 4xxx, 5xxx | (301) 594-4654 |
| Other | (301) 594-4692 |

Additionally, for questions on the promotion and advertising of your device, please contact the Office of Compliance at (301) 594-4639. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97) you may obtain. Other general information on your responsibilities under the Act may be obtained from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address http://www.fda.gov/cdrh/dsma/dsmamain.html.

Sincerely yours,

Mancy C. Brogdon
Nancy C. Brogdon

Director, Division of Reproductive, Abdominal and Radiological Devices

Office of Device Evaluation

Center for Devices and Radiological Health

Enclosure

Indications for Use

| 510(k) Number (if known): _K041671 |
|---|
| Device Name:ImagenMD TM |
| Indications for Use: The ImagenMD TM system is a software and computer system that allows the user to view |
| The ImagenMD TM system is a software and computer system that any object of the Images from a remote location. The system allows myocardial perfusion SPEC or PET images from a remote location. The system allows the user to view quantify and process perfusion and gated SPECT images. |
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| |
| Prescription Use X Over-The-Counter Use (21 CFR 801 Subpart C) |
| (PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE OF NEEDED) |
| Concurrence of CDRH, Office of Device Evaluation (ODE) |
| |
| Savid a lym Page 1 of 1 |
| (Division Sign-Off) Division of Reproductive, Abdominal, and Radiological Devices 510(k) Number |